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Northeastern Section of the American Chemical  
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### The Nucleus

Northeastern Section of the American Chemical Society

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# *The* NUCLEUS

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OF THE NORTHEASTERN SECTION OF THE AMERICAN CHEMICAL SOCIETY

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Afternoon Symposium, Jointly with the American  
Institute of Chemists

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EMIL OTT

Food Machinery and Chemical Corporation

"Professional Obligations of Chemists"

October 9, 1958

Thursday, 8:00 p.m.

## PLACES OF MEETINGS

Dinner, 6:30 p.m.

The Campus Room, M.I.T. Graduate House

Address in Huntington Hall (Room 10-250)

The Massachusetts Institute of Technology

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Developed by Dr. John R. E. Hoover, of Philadelphia, for determining with ease and accuracy capillary melting points in accordance with official U.S.P. and other methods.

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A standard 100 ml beaker of borosilicate glass is used as the melting point bath, eliminating replacement of costly custom glassware in the event of breakage. The bath is protected from dust and air currents by being completely contained within the instrument case. Observation of the melting point is facilitated by the magnifier

and adjustable, self-contained lighting. Oil bath is stirred by an electrically driven stirrer with speed controlled from instrument panel. Provision is made for running as many as five samples simultaneously.

A unique feature of the apparatus is a built-in capillary vibrator which permits the capillaries to be shaken violently and uniformly, thereby insuring uniform packing of sample in the capillary. Instrument is housed in a gray metal case, with thermometer protected by metal guard. For ease in replacing or changing the bath liquid, bath assembly, including stirrer and thermometer, can be lifted out of the cabinet.

**6406-H. Capillary Melting Point Apparatus, Thomas-Hoover "Uni-Melt,"** electrically heated, as above described, complete with thermometer—10 to 360°C, calibration standards, heating rate calibration chart, 3 oz. Silicone Oil, 1 vial Capillaries, and 6 ft. three-wire connecting cord with 2-prong attachment plug cap; for 115 volts, 60 cycles, a.c. .... **170.00**



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THE FOUR-HUNDRED AND SEVENTIETH MEETING  
of the  
NORTHEASTERN SECTION A. C. S.

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THURSDAY, OCTOBER 9, 1958

The Massachusetts Institute of Technology, Room 10-250  
Entrance, 77 Massachusetts Avenue or the Dorrance Biology Laboratories

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AFTERNOON MEETING

Symposium: Jointly with the American Institute of Chemists, New England Chapter

W. George Parks, University of Rhode Island, Chairman

- 4:00 p.m. George B. Kistiakowski, Harvard  
"Chemistry and the National Interest"
- 4:30 p.m. Questions and Discussion
- 4:45 p.m. Robert H. Rines, Rines and Rines, Boston  
"Patents—at the Cross Roads"
- 5:15 p.m. Questions and Discussion
- 5:30 p.m. Preprandial Hour (Reservations Necessary) Campus Room
- 6:30 p.m. Dinner (Reservations Necessary) in the Campus Room

Price \$2.75 per person (tax incl.)

Should you desire a place reserved, mail the enclosed post card, at once, or, after 2:30 p.m. Thursday, call UNiversity 4-6900, Ext. 2961.

- 7:30 p.m. Austin W. Fisher, Jr., A. D. Little, Inc.—After dinner talk  
"Industry Aid to the Education Program of the New England Council"

EVENING MEETING

In Huntington Hall, 10-250, M.I.T.

Howard H. Reynolds, presiding

- 8:00 p.m. Emil Ott, Food Machinery and Chemical Corporation  
"Professional Obligations of Chemists"
- 9:15 p.m. Social Hour in the Moore Room

***Signing and mailing the dinner card or telephoning for reservations must be regarded as an obligation.***

All interested are invited.

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After five-thirty o'clock, the Reception Hall of the Campus Room, 308 Memorial Drive, west side of the Graduate House, will be available for members of the Section planning to attend the dinner.

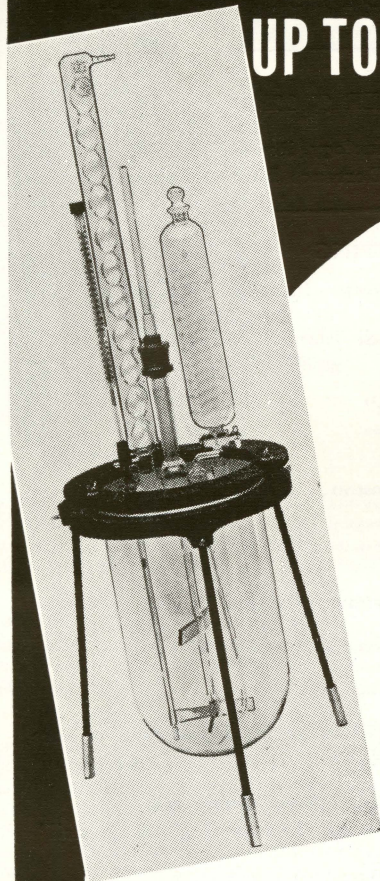
A Committee will be in charge.



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Size of Flask, I.D.	7x17 $\frac{1}{2}$ "	8 $\frac{1}{4}$ x17 $\frac{1}{2}$ "	10 $\frac{1}{4}$ x17 $\frac{1}{2}$ "	12 $\frac{1}{2}$ x17 $\frac{1}{2}$ "	12 $\frac{1}{2}$ x23 $\frac{1}{2}$ "	12 $\frac{1}{2}$ x29 $\frac{1}{2}$ "
Complete .....	\$224.48	\$256.69	\$287.15	\$322.27	\$335.12	\$360.12
J-1299-2 Glas-Col Heating Mantle (Aluminum), each	69.00	80.00	105.00	130.00	150.00	170.00



**Note:** If a thermometer with a range other than that stipulated is required, please specify.

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# *The* NUCLEUS

Published monthly from October to June by the Northeastern Section of the American Chemical Society, Inc.

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Forms close for advertising on the 15th of the month and for text on the 12th of the month preceding issue.

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## Editorial

### CHEMISTRY AND THE INTERNATIONAL INTEREST

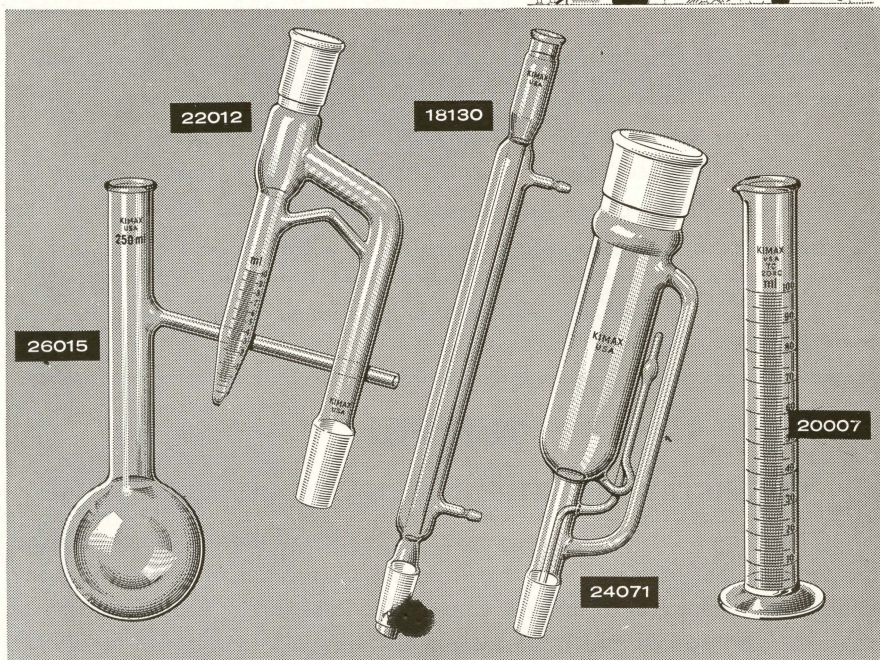
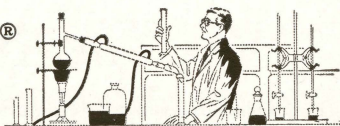
The title of Professor Kistiakowski's symposium address brings to mind the thought that whatever may be beneficial on the national scene for one country may be useful to many a country. At least it may have overtones of value to many nations and communities. Certainly his address will be viewed in the widest possible manner. On this account the title of this editorial notice substitutes the word, international, for national, used in the original announcement.

An old book, appearing in 1895, now not read much, comes into the picture. In that year Professor Lassar Cohn published his volume "Chemistry in Daily Life," under the original title "Die Chemie im Täglichen Leben." The eleventh edition, and perhaps the latest, appeared in 1925. Each new appearance of the book added references to the newer developments in chemistry affecting the daily life of mankind. In a sense, to use a very modern term, the book emphasized the by-word, "better things for better living through chemistry." By the time the tenth edition appeared in 1920, translations had been made into more than a dozen languages, including English, French, Italian, Spanish, Russian, Finnish, Swedish, Polish, Hebrew, etc.

The book took the form of twelve lectures, done in a thoughtful and engaging tone. It begins with the atmosphere which we breathe and in which have our being. It ends with a discussion of metals and alloys. The appeal of these lectures was world wide. What better could we wish than that the address of George B. Kistiakowski reach round the world.



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## OCTOBER SPEAKER



Photograph by Shelburne Studios

## EMIL OTT

Dr. Emil Ott joined Food Machinery and Chemical Corporation's Chemical Division in 1955, as Director of Central Chemical Research, and Vice President of the Chemical Divisions. In 1958 he was named Vice President, Chemical Divisions, in charge of Research and Development.

Prior to joining FMC, Dr. Ott spent sixteen years as Director of Research for Hercules Powder Company. Earlier, he was a member of the chemistry faculty of Johns Hopkins University.

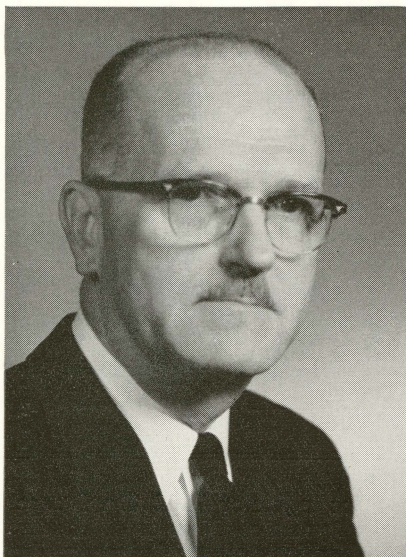
Born in Zurich, Switzerland, Dr. Ott received his Ph.D. degree from The Swiss Federal Institute of Technology in 1927, and came to the United States in the same year. He spent a year in development work with Stauffer Chemical Company in 1927, before joining the Johns Hopkins University faculty.

He has served in the American Chemical Society in various capacities, being a member of the Board of Directors from 1948 through 1950. He also has been active in many other technical organizations, including the Gordon Research Conferences, where he has served as Chairman of the Management Committee. Dr. Ott is a Director of the Industrial Research Institute, a Fellow of the Physical Society and of the New York Academy of Sciences, and a past president of the Association of Research Directors. He is currently President of The American Institute of Chemists.

Internationally, he has represented the United States at meetings of the International Union of Chemistry, the Food and Agricultural Organization of the United Nations, The Society of Chemical Industry (England) and the Société de Chimie Industrielle (France).



## SYMPOSIUM CHAIRMAN



W. GEORGE PARKS

W. George Parks was born in Rockwood, Pennsylvania. He attended the public schools and then the University of Pennsylvania in Philadelphia, Pa. He was graduated with the A.B. degree with a major in chemistry in 1926. During the years 1927-31 he attended graduate school at Columbia University in New York City. The M.A. degree was obtained in 1928 and the Ph.D. (chemistry) in 1931. He was a Statutory Assistant in the Department of Chemistry during his graduate study. In 1931 he went to the University of Rhode Island in Kingston, Rhode Island as Assistant Professor of Chemistry. He has remained at the University of Rhode Island since 1931, progressing from Assistant Professor to Associate Professor and now Professor of Chemistry. In 1950 he was appointed Head of the Department. He is Chairman of the University Committee on Research.

Dr. Parks has been Executive Director of the National Academy of Sciences-National Research Council Advisory Board on Quartermaster Research and Development since 1943. He has been the Director of the Gordon Research Conferences at Colby

Junior College, New Hampton School and Kimball Union Academy, in New Hampshire, since 1947. He is a member of the American Chemical Society, American Institute of Chemical Engineers, American Association of Textile Chemists and Colorists, Fellow of the American Association for the Advancement of Science and the New York Academy of Sciences, Honorary Member, American Institute of Chemists. This year he was elected a member of the Board of Trustees of Colby Junior College. He is a member of the Scientific Advisory Panel to the Secretary of the Army.

For the past 25 years he has been very active in research and development, including catalytic vapor phase oxidation, textile research, fire resistance of textiles, solvent extraction and organic syntheses. During recent years he has been most active in textile research, development and testing. He organized the American Research and Testing Laboratories, Inc., Pawtucket, R. I. and serves as the President and Director of the Laboratories.

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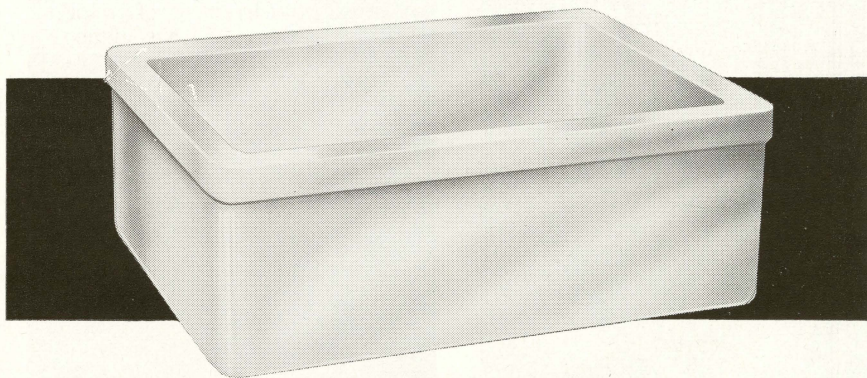
## SYMPOSIUM SPEAKER

### GEORGE BOGDAN KISTIAKOWSKI

George Bogdan Kistiakowski was born in Kiev, Russia, November 18, 1900. He received his doctorate from the University of Berlin in 1925 and spent the following two years at Princeton University as an International Board Fellow in Physical Chemistry, followed by two years as research associate. In 1933 he became a U. S. citizen. In 1930 he came to Harvard as Assistant Professor where he advanced rapidly to Professor in 1937. He now holds the chair of Abbott and James Lawrence Professor of Chemistry. He served in World War I as a tank commander and since has held many high patriotic responsibilities including an unusually significant assignment with the Manhattan Project of World War II and most recently as member of President Eisen-

*(Please turn to Page 10)*





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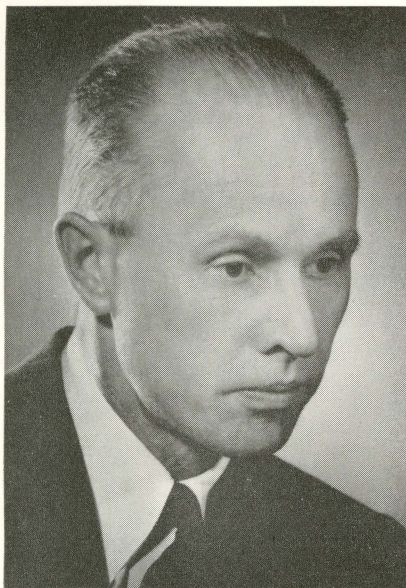


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GEORGE B. KISTIAKOWSKI

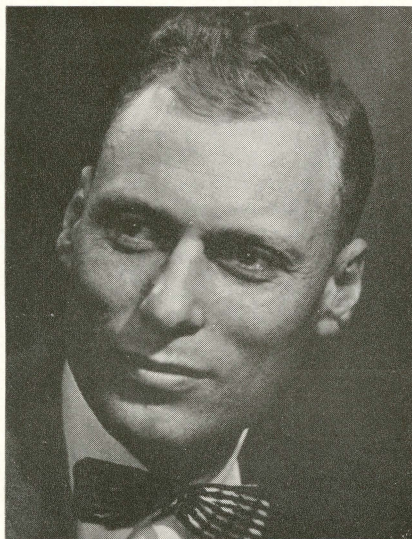
*(Continued from Page 8)*

hower's "The President's Science Advisory Committee". Many honors have been awarded to Professor Kistiakowski including the Medal of Merit in 1946 and the King's Medal for Service in the Cause of Freedom (U.K.) in 1948. Among others he is a member of the National Academy, A.A.A.S., Chemical Society from which he was awarded the Nichols Medal in 1947, the Physical Society, Faraday Society, Philosophical Society and the American Academy of Arts and Sciences. His extensive chemical researches have been in the fields of chemical kinetics, thermodynamics of organic molecules, molecular spectroscopy, explosives and explosions. His widely scattered students hold important positions in universities, industry and government.

The most recent honors to be received by Professor Kistiakowski are the Honorary D.Sc. by Harvard University in 1955 and the Priestly Award of Dickinson College in 1958.

Professor and Mrs. Kistiakowski (the former Irma E. Schuler) make their home in Lincoln, Massachusetts.

## SYMPOSIUM SPEAKER



ROBERT H. RINES

Robert H. Rines was born in Boston, Mass., August 30, 1922. He received the Bachelor of Science degree in Physics in 1942 from M.I.T. and the LL.B. degree in 1947 from Georgetown University. During World War II he served as an officer in the Signal Corps, European and Pacific Theatres, specializing in radar. During 1945-46 he served as Commanding Officer of the Army Research program at Fort Drum, Naval Research Laboratory, on detached service from Signal Corps Engineering Laboratories.

Following his military service, Mr. Rines was a patent examiner in the U.S. Patent Office (1946) and initiated the practice of law in 1947, specializing in patents, as a partner in Rines and Rines. During the Korean War, Mr. Rines aided part time in development of several of his own inventions relating to underwater sound and radio under an Office of Naval Research program. He holds patents on various radio, radar, sonar and other inventions.

Mr. Rines is a senior member, Institute of Radio Engineers, AAAS; a member of Sigma Xi (MIT chapter);

*(Please turn to Page 14)*



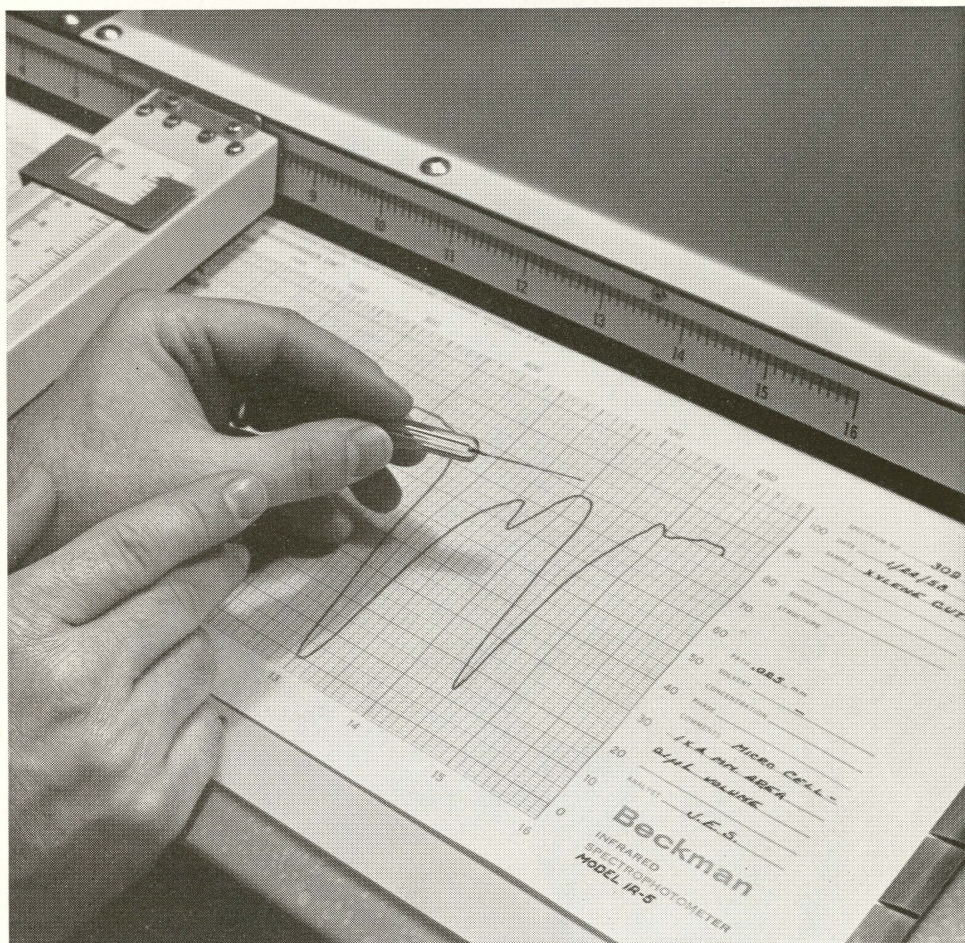


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## HOWARD HECKER REYNOLDS

*(Continued from Page 12)*

The World War II years were spent as a member of the Technical Department of the Wyandotte Chemicals Company, Wyandott, Michigan, and in the Research Laboratory of the Davison Chemical Company in Baltimore. In 1944 Dr. Reynolds returned to the country of his youth when he began working for the Dewey and Almy Chemical Company in Cambridge. When the Cryovac Company, was organized, Dr. Reynolds became associated directly with it as Manager of Research. After seven years his position was changed to Manager of the Technical Department (1957).

Among his professional activities he counts Consultant to the Rubber Reserve on Special Polymers (1944), Past Chairman of the Boston Section of the American Institute of Chemical Engineers, of the Elastomers and Plastics Group, Northeastern Section, and of the, Chemistry Education and Publications Committees of the Northeast Section, A.C.S. He is a member of the American Chemical Society, the American Institute of Chemical Engineers and of the Society for the Plastics Industry.

His interest in public affairs is evidenced by his term as president of the Lexington Toastmasters, and of the Chenery School P.T.A. (Belmont). At the present time he is a District Director of the Community Fund.

In 1940, Dr. Reynolds was married to Miss Sally Riley of Belmont. With their four children, Langdon, Jonathan, Sarah, and Cynthia, they make their home in Belmont.

Among his hobbies Dr. Reynolds counts tennis, golf, swimming, gardening and wood-working.

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## ROBERT H. RINES

*(Continued from Page 10)*

R.E.S.A.; and is a Registered Professional Engineer in Mass. He is a member of the Bar of the Supreme Court of the United States, Courts of Commonwealth of Mass., Courts of District of Columbia, U.S. and Canadian Patent Offices, Federal Communications Commission, Tax Court.

Mr. Rines has been Gordon McKay Lecturer on Patent Law, Harvard University, 1956 to date. He is a member of the American Bar Association and American Patent Law Association (committees on Administrative Law, Government Patent Policies, Taxation, Anti-Trust, Judicial Appointments).

Mr. and Mrs. Rines and their two children reside in Belmont, Mass.

## ELASTOMER & PLASTICS GROUP

MAX TAITEL, Chairman, U.B.S. Chemical Corporation, UNIVERSITY 4-7300.

J. HORACE FAULL, JR., Chairman-Elect, Consultant, KIRKLAND 7-8334.

The first meeting of the year 1958-1959, inaugurating the second decade of the Group, will take place on Tuesday, October 21, 1958. It will be the annual meeting with election of officers. It will be held in the Morse Auditorium of the Museum of Science, Science Park, Charles River Dam, Boston, Massachusetts.

Max E. Lerner, Editor of "Rubber Age" New York, N. Y., will speak on

### "The Latest Developments in the Polymer Field"

Preceding the meeting there will be a preprandial hour at 6:00 p.m. (cost \$1.00), followed by a dinner (cost \$3.00) at 6:45 p.m. in honor of the speaker, in the Morse Auditorium.

*(Please turn to Page 16)*





## New PRES·sure clip seals PYREX stopcocks against pressure and vacuum

Now you can get stopcocks that seal tight enough for pressure and moderate high-vacuum work—at no more than standard stopcock price!

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Even with this firm sealing you have no trouble valving, since the clip does not affect the plug's rotation.

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**1. Wide choice of designs.** Including straight bore, three-way with solid stopper; three-way "T"; two-way mercury seal; high-vacuum type with offset side arms.

**2. Rugged design.** Molded bodies and extra heavy sidearm tubes are accurately joined. Glass at this juncture is

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**3. Precision grinding.** Stopcock bodies and stoppers are precision ground to minimize leakage and freezing. All popular sizes are  $\frac{1}{8}$  interchangeable.

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## ELASTOMER AND PLASTICS GROUP

(Continued from Page 14)

Reservations for the preprandial hour and the dinner are necessary and may be made in writing or by phone with Mr. Henry S. Anthony, Tyler Rubber Company, 10 Railroad Street, Andover (telephone GReenleaf 5-5300) no later than 10:00 a.m. Monday, October 20, 1958. Reservations are binding.

The next meeting will be a plant visit, on November 17th, to Owens Corning Fiberglass Co., in Ashton, Rhode Island. Full details will be printed in the November NUCLEUS.

*All interested persons are invited.*

The officers nominated for 1958-1959 are as follows:

Chairman — J. Horace Faull, Jr., Consultant  
Chairman-elect — James H. FitzGerald, Harwick Standard Chemical Co.  
Secretary — Joseph M. Donahue, Goodyear Tire and Rubber Co.  
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## ANALYTICAL GROUP

DAVID N. HUME, Chairman, M.I.T. University 4-6900, Ext. 507.

GEORGE R. SOMMER, Secretary-Treasurer, Howe and French. HANcock 6-5910.

The first meeting of the Analytical Group will be held at 8:00 p.m. on Wednesday, October 15, 1958, in Room 2-131, M.I.T.

Edward F. Greene, Associate Professor of Chemistry, Brown University, will speak on

**"The Use of Shock Waves for Quantitative Chemical Work"**

Prior to the meeting there will be a dinner at 5:45 p.m. in the M.I.T. Faculty Club on the sixth floor of the Sloan Building at 50 Memorial Drive, Cambridge. Reservations may be made by telephoning Mr. Russell T. Werby of the Werby Laboratories, LI 2-0739.

*All interested persons are invited.*

## ANALYTICAL SPEAKER EDWARD F. GREENE

Edward Forbes Greene was born in New York City, December 29, 1922. After a childhood spent in China he has lived mostly in New England. His undergraduate and graduate study was carried out at Harvard where he received the doctorate in chemistry in 1949. There was a three year interlude during the war when he worked first as a chemist for the Shell Oil Company at Wood River, Illinois, and later as an electronics technician in the Navy.

In 1949 Dr. Greene left Cambridge for a summer at Los Alamos. With the fall opening of schools he was at Brown University as a research associate in chemistry. He is an associate professor at the present time.

Dr. Greene's research interests are largely in the field of fast and high temperature reactions in gases, particularly as studied in shock wave and molecular beam experiments.

The year 1949 was very important for Dr. Greene. He received the doctorate; went to Los Alamos, started on his academic career, joined the American Chemical Society and married Miss Hildegard Forbes all in that year. Professor and Mrs. Greene are the parents of three children now growing up in their Providence, Rhode Island, home.

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## ANALYTICAL GROUP OFFICERS 1958-1959

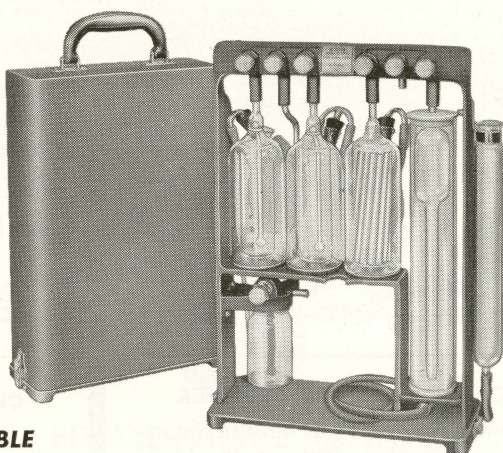
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**CHARLES LEVY**, Chairman, Watertown Arsenal,  
Watertown 4-8540, Ext. 685.

**RICHARD PEAK**, Secretary-Treasurer, Raytheon  
Mfg. Co., Bigelow 4-7500, Ext. 407.

The first fall meeting of the Boston Section of the Electrochemical Society will be held at 8:00 p.m., Tuesday, October 14, 1958 in the Arthur D. Little, Inc. Laboratories at Acorn Park, Concord Turnpike, Cambridge. There will be a tour of the Laboratories at 5:00 p.m. to assemble in the cafeteria for a social hour at 6:00 p.m., followed by a dinner at 6:30 p.m. The cost of the dinner will be \$3.00. Reservations may be made by calling Mr. Richard Peak, Secretary-Treasurer, at Bigelow 4-7500, Ext. 407.

Robert B. Mears of the United States Steel Corporation will speak in the cafeteria, at 8:00 p.m., on

"Electrochemistry of Localized Corrosion"

### ROBERT B. MEARS, SPEAKER

Robert B. Mears was born in Scranton, Pennsylvania, January 28, 1907. He obtained the B.S. degree at Penn State College in 1928. Thereafter he was an instructor in the Polytechnical Institute of Brooklyn, New York, from 1929 to 1930. His graduate studies were carried out in England where he received the doctorate in metallurgy, from Cambridge in 1935. While in England he was a Carnegie scholar at the British Iron and Steel Institute. After returning to America in 1935, Dr. Mears was first associated with the Aluminum Co. of America until 1945 then with the Carnegie Illinois Steel Corporation. In 1952 he joined the U. S. Steel Corporation, where in 1954 he was advanced to his present position of Director of the Applied Research Laboratory.

Dr. Mears is a member of the Electrochemical Society, the Association of Corrosion Engineers, the Society for Testing Materials, the Institute for Mining and Metallurgical Engineering and the British Institute of Metals. His researches comprise electroplating, electrochemistry of corrosion, mechanisms of stress corrosion, cathodic protection and materials selection.

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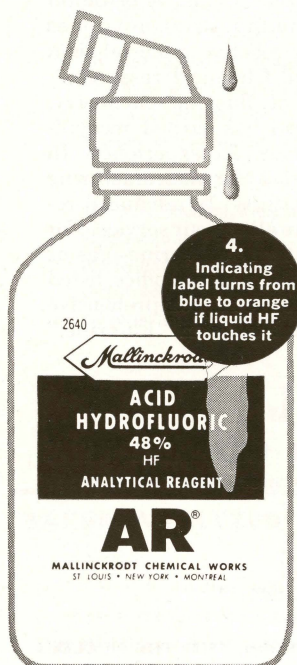
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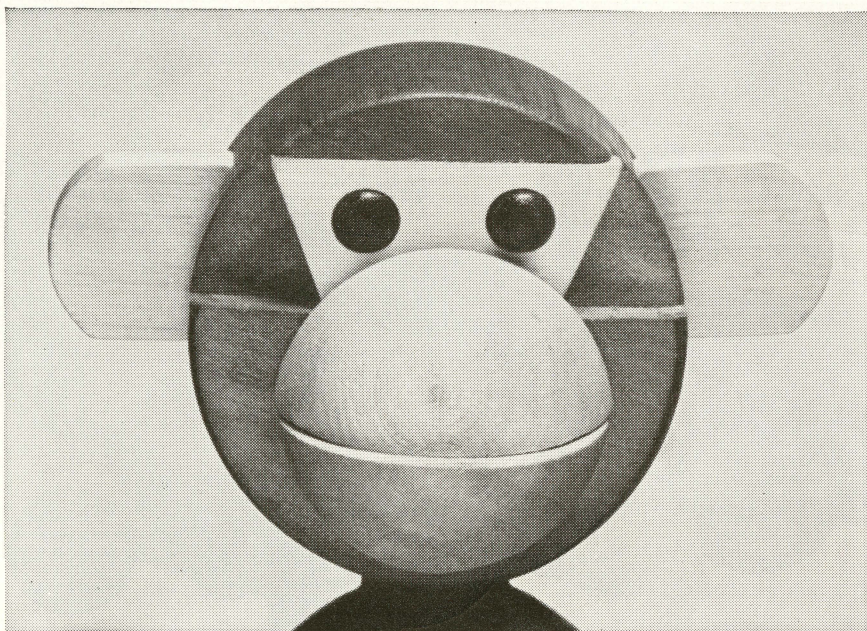
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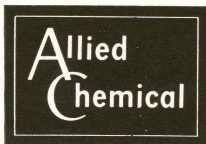
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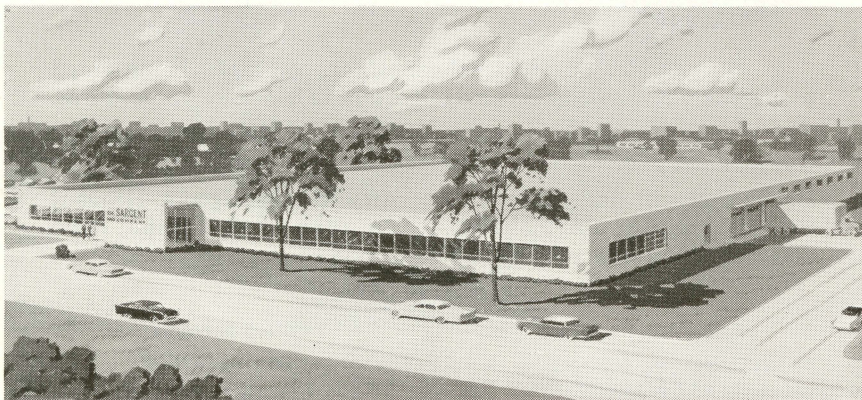
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## CIVIL SERVICE

*(Continued from Page 18)*

the U. S. Civil Service Commission, Washington 25, D. C. Applications will be accepted by the Central Board of U. S. Civil Service Examiners, Veterans Administration, Washington 25, D. C. until further notice.

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## NORTHEASTERN SECTION

Committees will be in the November NUCLEUS.

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## ANNUAL MEETING OF THE DIRECTORS

The Annual Meeting of the Directors of the Northeastern Section of the American Chemical Society was held at 4:15 P.M. on Wed., July 30, 1958 in the Library Lounge of M.I.T. Lockhart B. Rogers presided. The following were present: Lloyd H. Perry, Stuart B. Foster, John T. Blake, Avery A. Ashdown, Arnet L. Powell, Arno H. A. Heyn, David M. Howell, Ernest C. Crocker, Austin W. Fisher, Jr., P. Calvin Maybury, and Francis J. Roderrick.

The minutes of the May meeting were accepted as printed in THE NUCLEUS.

Lloyd H. Perry presented reports of the Treasurer and Chairman of the Budget. He reported an operating deficit for 1957-58 in excess of \$1,600. The question was raised concerning the responsibility for the transfer of funds. One view was that the present directors should do this since they had approved the deficit budget. However, no action was taken. The report was accepted.

The Annual Report of the Board of Trustees was read by John T. Blake. The current market value of the Sections capital investments is \$154,819.79 as compared to an original book value of \$92,854.62. The quality of these investments was cited. In spite of the downward trend in the Dow Jones Industrial average of about 10%, the market value of our investments has decreased only slightly more than 1%. The rate of return in these invested funds is 6.5% on the original cost and just under 4% on the present market value. The report was accepted.

*(Please turn to Page 26)*



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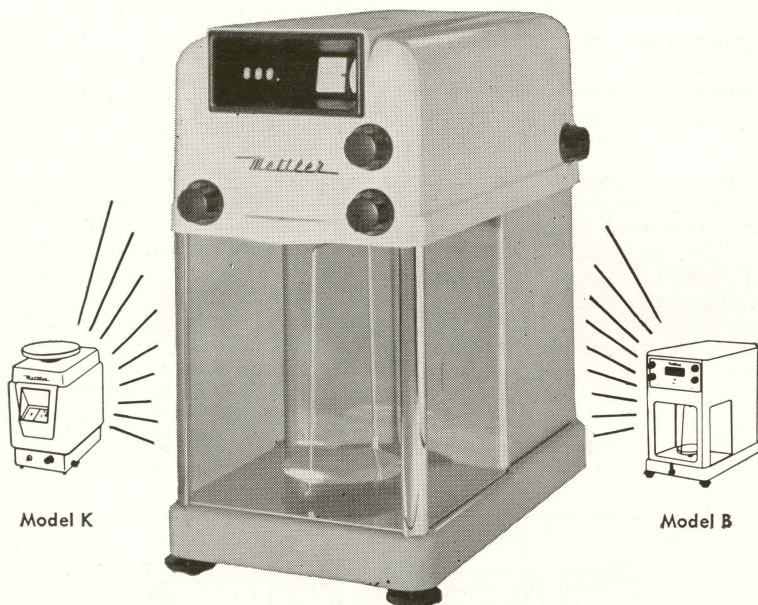
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## DIRECTORS

(Continued from Page 23)

The report of the Board of Publications was presented. In essence it was a commendation of the work of Avery A. Ashdown and Allen D. Bliss. The Directors also voiced their praise in accepting the report. In addition to the report, a communication from Marco H. Scheer was presented nominating Avery A. Ashdown as Editor of THE NUCLEUS and Allen D. Bliss as Business Manager.

The Directors voted and approved the appointments.

Howard H. Reynolds submitted the report of the Program Committee. The assistance provided by Dr. Lockhart B. Rogers in establishing the fall portion of the program was acknowledged. The Committee recommended that the multa symposia program which was moderately successful be tried again in some future year.

The report of the Chemical Education Committee was accepted as presented by the Committee Chairman, P. Calvin Maybury.

The 1957-1958 program of the Public Relations Committee was summarized by Chairman, Arnet L. Powell. He reported a change in organization which has provided separate subcommittees for press, radio, and television. The Press Subcommittee estimated 629 news releases to newspapers, radio, television, and other publicity outlets for the period July, 1957 - June, 1958. The report was accepted.

The report of the Membership Committee was given by Arno H. A. Heyn. The Committee's records show a membership increase from 2364 on October 1, 1957 to 2509 on May 1, 1958. There were two recommendations in the report:

1. The practice instituted in 1957-1958 of having Co-chairmen be continued.
2. The role of associate members should be reconsidered. If associate membership is found to fill a need, means should be found to encourage greater membership at this level. If it is found that associate membership does not fill an important need, this grade of membership should be eliminated.

The report was accepted.

There was no report from the Committee on Constitution and By-laws.

The report of Hospitality Committee was presented by David M. Howell, Chairman. A successful year of activity was reported in the Committee's assigned area, and in cooperating with the Membership Committee and THE NUCLEUS. The report was accepted.

Fred W. McLafferty reported on the progress of the Building Fund. He was extended a vote of thanks by the Directors.

There was no report by the Committee on Local Groups.

The Financial report for THE NUCLEUS covering the period June 25, 1957 - June 26, 1958 was approved as read by Avery A. Ashdown.

The reports of the Norris and Richards Award Committees were accepted as read.

Auditor, Stuart B. Foster reported the records of the section to be accurate and in order for both the Treasurer and the Business Manager of THE NUCLEUS.

A vote of thanks was extended to retiring Directors, Stuart B. Foster and Ernest C. Crocker.

Chairman Lockhart B. Rogers read a communication from A.C.S., Washington in connection with the coming Boston meeting.

Briefly, the letter informed the Chairman that the bulk of the responsibility falls on the headquarters organization, Mr. Winstead and the National Meetings Department Staff. However, help will be needed in four areas; Ladies' Entertainment, Plant Trips, Personnel, and Equipment.

At a guess, sixty students will be needed to fill a variety of positions.

It was the considered opinion of a number of the Directors that there is insufficient time for the Local Section to do an adequate job of preparing for the spring meeting.

Since there was no further business, the meeting was adjourned at 5:15 P.M.

Respectfully submitted,

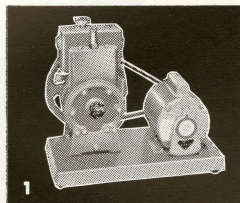
(for) RIDGLEY G. SHEPHERD, JR.  
*Secretary, Northeastern Section*

FRANCIS J. RODERICK  
*Secretary pro tempore*

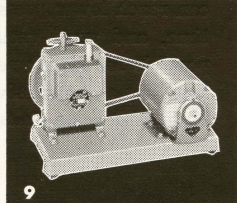
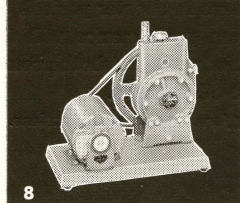
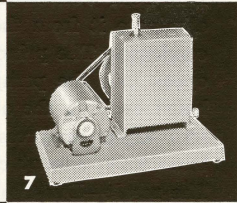
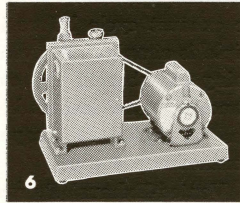
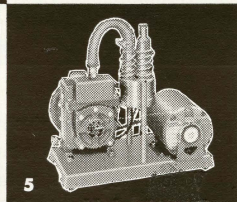
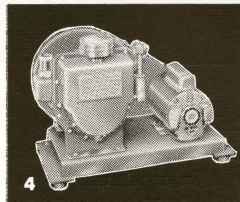
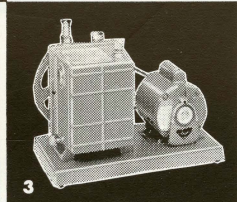
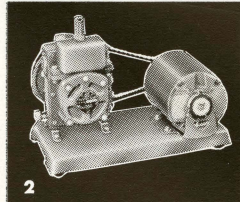


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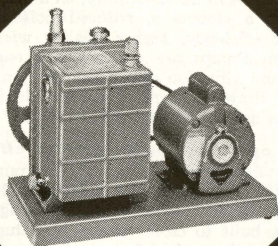
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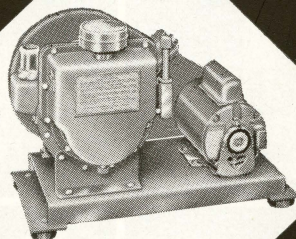
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